CLAIMS:-

A printhead assembly for an inkjet printer, the printhead assembly comprising:
a plurality of printhead modules;

a support member with a first component and a second component, the first component adapted for mounting the printhead assembly within an inkjet printer, and the second component adapted to mount the printhead modules, the second component having a coefficient of thermal expansion closer to that of the printhead modules than the first component; wherein,

the first component is bonded to the second component via intermediate resilient naterial; such that,

the first component can expand more than the second component.

- 2. A printhead assembly according to claim 1 wherein the support member is a beam and the printhead modules include MEMS manufactured chips having at least one fiducial on each;
- wherein,

the fiducials are used to misalign the printhead modules by a distance calculated from:

- i) the difference between the coefficient of thermal expansion of the beam and the printhead chips;
- 20 ii) the spacing of the printhead chips along the beam; and,
 - iii) the difference between the production temperature and the operating temperature.

- 3. A printhead assembly according to claim 2 wherein the first component of the beam is an outer metal shell, and the second component of the beam is a core of silicon with the outer metal shell.
- 4. A printhead assembly according to claim 3 wherein the elastomeric material is an elastomeric layer interposed between the silicon core and metal shell.
 - 5. A printhead assembly according to claim 3 wherein the outer shell is formed from laminated layers of at least two different metals.
 - 6. A printhead assembly according to claim 1 wherein the printhead is a pagewidth printhead for printing across the width of a page simultaneously.

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